



香港中文大學統計學系

Department of Statistics

THE CHINESE UNIVERSITY OF HONG KONG

SEMINAR

DEPARTMENT OF STATISTICS
THE CHINESE UNIVERSITY OF HONG KONG

Prediction and Inference

INVITED SPEAKER

Dr. Chung Hang Edwin Fong,
Lead Data Scientist,
Novo Nordisk

TIME

January 30, 2023 (Mon) · 2:30 pm - 3:30 pm

VENUE

Zoom ID: 606 898 8598 · Password: cuhkstat · [Zoom link](#)

ABSTRACT

There has been tremendous recent progress in the development of prediction models, but statistical inference on parameters of interest is still of priority in many fields. This seminar will exhibit how predictive modeling can help achieve the task of statistical inference. In particular, one focus of the seminar will be on the connection between Bayesian inference and the prediction of future observables. We will see that Bayesian posterior uncertainty arises from the imputation of an infinite population, allowing a generalization to the martingale posterior which relies purely on the predictive distribution. This connection will further allow us to reinterpret the Bayesian bootstrap and introduce new Bayesian nonparametric methodologies centered on prediction. In the latter section of the seminar, I will then discuss the role of predictive models in causal inference and its applications, and further connections to Bayesian inference.